

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	D. I	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/741,539		12/19/2003	Farid Nemati	2000.010.00/US	4650
41894	7590	05/12/2005		EXAMINER	
WALTE	R D. FIELI	DS	DANG, PHUC T		
FIELDS I	P, PS			_	<u> </u>
601 MAIN	601 MAIN STREET			ART UNIT	PAPER NUMBER
SUITE 405				2818	
VANCOUVER, WA 98660				DATE MAILED: 05/12/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

H. A

	Application No.	Applicant(s)					
	10/741,539	NEMATI ET AL.					
Office Action Summary	Examiner	Art Unit					
	PHUC T. DANG	2818					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered time the mailing date of this c D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on <u>electrons</u> 2a) This action is <b>FINAL</b> . 2b) This 3) Since this application is in condition for alloware closed in accordance with the practice under Example 2.	action is non-final. nce except for formal matters, pro		e merits is				
Disposition of Claims		•					
<ul> <li>4)  Claim(s) 1-28 is/are pending in the application.</li> <li>4a) Of the above claim(s) 12-26 is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) is/are rejected.</li> <li>7)  Claim(s) 1-11,27 and 28 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>							
Application Papers							
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 19 December 2003 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	re: a)⊠ accepted or b)⊡ object drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 C	FR 1.121(d).				
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 121903.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate	<sup>-</sup> O-152)				

Application/Control Number: 10/741,539 Page 2

Art Unit: 2818

#### **DETAILED ACTION**

1. This application is a CIP of 10/706, 162 filed November 12, 2003.

## Restriction/election

2. Applicant's election without traverse of Group I (claims 1-11 and 27-28) filed on March 30, 2005, drawn to a semiconductor device and withdrawn Group II (claims 12-26).

Applicants have the right to file a divisional application covering the subject matter of the non-elected claims.

#### **Information Disclosure Statement**

3. The office acknowledges receipt of the following items from the applicant:

Information Disclosure Statement (IDS) filed on December 19, 2003.

## Specification

This application is in condition for allowance except for the following formal matters:

4. Claim Objections

Claims 1, 3, 7, 8, 10 and 27 are objected to because of the following reason:

In claim 1, line 5, insert "a" before -- temperature --.

In claim 3, line 3, insert "an" before -- insulating material --.

In claim 7, line 3, insert "a" before -- dielectric --.

In claim 8, lines 9-10, insert "the" before – temperature --.

In claim 10, line 3, insert "an" before -- oxide --.

In claim 27, line 4, insert "a" before -- temperature --.

Application/Control Number: 10/741,539 Page 3

Art Unit: 2818

## Allowable Subject Matter

5. Claims 1-11 and 27-28 would be allowed.

The following is a statement of reason for the indication of allowable subject matter:

Claims 1, 8 and 27 are considered allowable since the prior art of record and the considered pertinent to the applicant's disclosure does not teach or suggest a plurality of memory cells, at least one of the memory cells comprising a thyristor, and an electrode disposed over a region of the thyristor, and a bias circuit to bias the electrode with a voltage level dependent on temperature as recited in claim 1 and the thyristor comprising an anode/cathode, a cathode/anode, and first and second base regions disposed in contiguous series relationship between the anode/cathode and the cathode/anode, an electrode over one of the first and second base regions and operable under bias to affect an electric field, a temperature dependent bias circuit to bias the electrode with a voltage dependent on the temperature as cited in claim 8 and a semiconductor memory device comprising a thyristor, an electrode capacitively-coupled to one of the base regions of the thyristor, and means for setting a bias level of the electrode dependent on a temperature as cited in claim 27.

Prosecution on the merit is closed in accordance with the practice under Ex Parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Application/Control Number: 10/741,539

Page 4

Art Unit: 2818

When responding to the Office action, Applicants' are advice to provide the Examiner with the line numbers and page numbers in the application and/or references cited to assist the Examiner to locate the appropriate paragraphs.

#### Conclusion

- Applicants are advised to cancel the non-elected claims of Group  $\Pi$  (claims 12-26) in response to the next Office action if the application is considered to be allowed.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuc T. Dang whose telephone number is (571) 272-1776. The examiner can normally be reached on 8:00 am-5:00 pm.
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571) 272-1787. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and After Final communications.
- Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Jangs hur

Phuc T. Dang

**Primary Examiner** 

Art Unit 2818